

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

BUREAU OF AIR

DIVISION of AIR POLLUTION CONTROL

PERMIT SECTION

PROJECT SUMMARY for the
DRAFT TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT

STERIS Isomedix Services, Inc.
1160 South Northpoint Boulevard
Waukegan, Illinois 60085

Permit Engineer/Technical Contact: David Hulskotter, 217/782-2113

Community Relations/Comments Contact: Brad Frost, 217/782-7027

May 24, 2005
Springfield, Illinois

I. INTRODUCTION

This source has applied for renewal of the Title V - Clean Air Act Permit Program (CAAPP) operating permit (I.D. 097190AFG, Permit #04120009) for its existing operation. The CAAPP is the program established in Illinois for operating permits for significant stationary sources as required by the federal Clean Air Act, as amended in 1990, and 40 CFR Part 70. Unlike state operating permits, the conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA. This document is for informational purposes only and does not shield the Permittee from enforcement actions or its responsibility to comply with applicable regulations. This document shall not constitute a defense to a violation of the Act or any rule or regulation.

A Title V permit contains conditions listing the applicable state and federal air pollution control regulations that apply to a source. The permit conditions also establish emission limits, appropriate compliance procedures, and specific operational flexibility. The appropriate compliance procedures may include monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis to demonstrate that the source is operating in accordance with the requirements of the permit.

II. SOURCE DESCRIPTION INFORMATION

a. Location and nature of business

STERIS Isomedix Services is located at 1160 South Northpoint Boulevard in Waukegan. STERIS Isomedix Services provides sterilization services to a variety of medical product manufacturers using ethylene oxide sterilizers. This source typically uses more than 10 tons of ethylene oxide on an annual basis. Sterilization facilities using 1 ton of ethylene oxide are subject to the National Emission Standards for Hazardous Air Pollutants 40 CFR 63 Subpart O: Ethylene Oxide Emissions Standards for Sterilization Facilities. STERIS Isomedix Services uses 3 acid-water scrubbers to comply with 40 CFR 63 Subpart O.

b. National Ambient Air Quality Standard status for this area

This source is located in an area that is non-attainment of the National Ambient Air Quality Standards for ozone and PM_{2.5} and attainment for all other pollutants.

c. Major source status

The proposed permit is based on the source requiring a CAAPP permit because the source is in a source category designated by the USEPA, pursuant to 40 CFR 70.3(a)(5) [Section 39.5(2)(a)(iv) of the Act].

d. Significant emission units

Emission Unit	Description	Date Constructed	Emission Control Equipment
A1	Aeration Room #1	2000	Aeration Scrubber #1
A2	Aeration Room #2	2000	Aeration Scrubber #2
2	Ethylene Oxide Sterilizer #2	1994	Glygen Scrubber
4	Ethylene Oxide Sterilizer #4	1994	Glygen Scrubber
5	Ethylene Oxide Sterilizer #5	1994	Glygen Scrubber
6	Ethylene Oxide Sterilizer #6	1995	Glygen Scrubber
7	Ethylene Oxide Sterilizer #7	1994	Glygen Scrubber
8	Ethylene Oxide Sterilizer #8	1994	Glygen Scrubber
9	Ethylene Oxide Sterilizer #9	1994	Glygen Scrubber
10	Ethylene Oxide Sterilizer #10	1995	Glygen Scrubber
11	Ethylene Oxide Sterilizer #11	1994	Glygen Scrubber
12	Ethylene Oxide Sterilizer #12	1994	Glygen Scrubber

III. EMISSIONS INFORMATION

The proposed permit limits the source wide maximum annual emissions from significant emission units at the source. Insignificant activities at this source are not accounted for in the source-wide limit. Further unit specific emission unit limitations are found within Sections 5 and 7 of the proposed permit.

For purposes of fees, the source is allowed the following emissions:

Pollutant	Tons/Year
Volatile Organic Material (VOM)	5.39
Sulfur Dioxide (SO ₂)	0.01
Particulate Matter (PM)	0.09
Nitrogen Oxides (NO _x)	1.10
Hazardous Air pollutant (HAP), not included in VOM or PM	----
TOTAL	6.59

This proposed permit contains terms and conditions that address the applicability, and, if determined applicable, substantive requirements of Title I of the Clean Air Act (CAA) and regulations promulgated thereunder, including 40 CFR 52.21, Prevention of Significant Deterioration (PSD) and 35 IAC Part 203, Major Stationary Sources

Construction and Modification. Any such terms and conditions are identified within the proposed permit by T1, T1R, or T1N. Any conditions established in a construction permit [T1] pursuant to Title I and not revised or deleted in this proposed permit, remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them. Where the source has requested that the Illinois EPA establish new [T1N] or revise [T1R] such conditions in a Title I permit, those conditions are consistent with the information provided in the Title V application and will remain in effect pursuant to Title I provisions until such time that the Illinois EPA revises or deletes them.

This proposed permit does establish newly revised [T1R] requirements.

IV. EMISSIONS CONTROL PROGRAMS INFORMATION

a. Emissions Reduction Market System (ERMS)

Because this source is located in the Chicago ozone non-attainment area and emits volatile organic material (VOM), the proposed permit includes conditions to implement the Emissions Reduction Market System (ERMS). The ERMS is a market-based program designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as further described in Section 6.0 of the proposed permit. The proposed permit contains the Illinois EPA's determination of the source's baseline emissions and allotment of trading units under the ERMS, and identifies units not subject to further reductions.

V. COMPLIANCE ASSURANCE MONITORING (CAM) PLAN INFORMATION

The Compliance Assurance Monitoring (CAM) plan is a program for pollutant-specific emission units which use an add-on control device to achieve compliance with an emission limitation or standard, has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than major source threshold levels, and is not specifically exempt by 40 CFR Part 64. There are no specific emission units that require a CAM plan as identified in the Monitoring Requirements of Subsection 8 for each Section 7, Unit Specific Conditions for Specific Emission Units.

VI. OTHER PERTINENT INFORMATION

a. Fugitive Particulate Matter Operating Program

The fugitive operating program is intended to significantly reduce fugitive particulate matter emissions within certain affected locations and facilities in Illinois. The source is subject to the fugitive operating program for particulate matter. Normally, affected operations by this program include, but are not limited

to, addressing normal traffic pattern roads, parking facilities, and material piles and handling. Usually a source addresses the programs through the use of water, oils, or chemical dust suppressants.

b. Risk Management Plan (RMP)

A risk management plan (RMP) is a program required for a source affected by Chemical Accident Prevention for reducing the levels of emissions during an emergency, consistent with safe operating procedures. If the Permittee becomes subject to the RMP then the Permittee would be required to immediately implement the appropriate steps described in this plan should an emergency be declared. The Permittee then would be required to maintain and have this plan on file with the Illinois EPA.

VII. COMPLIANCE INFORMATION

The source has certified compliance with all applicable rules and regulations; therefore, a compliance schedule is not required for this source.

VIII. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a Title V permit. The Illinois EPA is therefore proposing to issue a Title V permit, subject to the conditions proposed in the draft permit.

Comments are requested by the Illinois EPA for the proposed permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.